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Farm · Home · School

FROM SICKLE AND SCYTHE TO FORAGE HARVESTER

For five thousand years the sickle and scythe were used to harvest both hay and grain. Commencing in the 1820's, a series of inventions produced the reciprocating blade and flexible cutting bar and the spring tooth rake. By 1865, mechanical cutting of hay predominated. However, the pitch fork remained the most universally used tool.

The hay fork and carrier, mechanical hay loader, ensilage cutter and silo, steam power hay press, sweep and buck rakes and the wood-frame side-delivery rake appeared in the order given by the end of the century.

In 1932, the pick-up baler met ready acceptance. By 1936, another significant milestone was reached with the introduction of the forage harvester. Mechanical unloading, which followed, marked the turning point in the acceptance of grass silage.

Against the background of years of struggle for survival, the transformation from the hand tool era to the age of horsepower and finally to today's mechanical power constitutes a miracle in the annals of human history.

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THE MACDONALD COLLEGE JOURNAL

Whew, It's Hot!

The thought has occurred to us on several occasions that we humans are the most unpredictable people on this earth! All winter long we are wishing summer was here—just so we could do something or other which necessitates a summer setting. Then when it does finally arrive we say, "Gosh it's hot, wish it would cool off a bit," or "Boy, what wouldn't I give to go skating!"

It may be the moon, or it may be that the continued hot weather does actually have an effect upon people. Whatever the cause, many people seem to do peculiar things during the summer. For instance, there was the Texan who told the judge that he became so frustrated and fed up with the continued 95 degrees in the shade heat they were having that he felt he had to do something; so what does he do but jump out of his apartment window! Then there was the hit and run California pedestrian who became so enraged at the car which blocked his path that he kicked in one headlight, dented a fender, threw a brick through the windshield and then disappeared! Finally, there's the case of the Englishman who paid the auctioneer one shilling for a life-size statue of a man suffering from the toothache, then had to pay a transport company to take it to his home!

We laugh at the antics of these people; they are funny, a little out of the ordinary—"odd" most of us would call them. The moon, the heat or perhaps they are just plain characters, whatever it is we can't help admiring their independence of spirit and freedom from the restraints of civilization. We hasten to add, however, in case our readers get the wrong impression, that we are not advocating the discarding of all restraints, but what we do admire is the independence of spirit shown by these people. In a society where conformity to the rule is becoming almost a fetish, we find it extremely refreshing to know that there are still some people in this world who are rebels, who are willing to throw restraint to the winds let the consequences be what they may.

We may, however, be able to learn a pretty important lesson from these people. Doing what the mass does is not always the correct procedure to adopt. Let us in our reading and conversation with others show a little of this independence of mind and thought which characterized the actions of these people. Because those in authority, and this goes for our own farm leaders too, tell us certain things is no reason why we should take them as "gospel truth." Independence of thought will breed a maturity of outlook which will enable us to pass judgement upon the policies and actions advocated.

After all, isn't this the stuff of which democracy is made? A people who follow the whims of those in authority without any thought of the consequences, the alternatives, the whys and wherefores, are rapidly going to lose not only their ability to think, but their grasp upon that freedom of thought and action, that toleration of conflicting points of view which form the basis of a sound and healthy democratic state.

Our Cover Picture

We have wanted to use this picture for a long time, but we didn't do it because we didn't know where it had been taken. We still don't, but it's a pretty spot and we're using it just the same.

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Man With A Mission

by Colin Muirhead

Does grassland farming mean forage harvesters and other expensive equipment to you? Then read this story of how one farmer has exploded the myth through the use of a little ingenuity and some good long term planning.

MR. KEN TREE of "Gladacres Farm," Stanbridge East, is a man with a mission. He talks, eats and sleeps grassland farming. "It's the only way to build up the productivity of a farm," he says, "especially on the rolling hillsides of the Eastern Townships." He pointed to the muddy river as it wandered slowly through his farm thick and heavy with the good earth, "We are losing some of our best soil after every heavy rain," he said, "and there's no need for it."

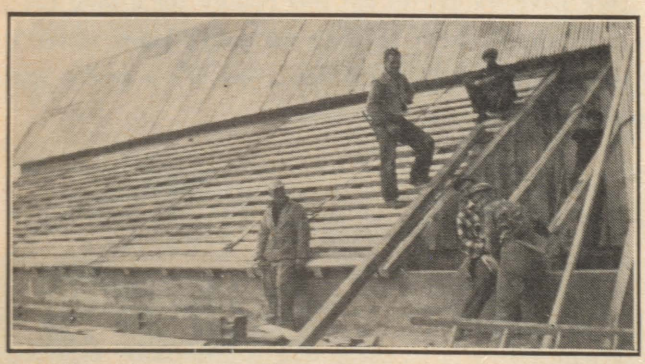
Mr. Tree farms 247 acres, 73 acres of which have been in the Tree family since 1896. These are more rolling than the other two sections which were acquired by the present owner. In 1946 he bought the old Moore farm of 96 rundown acres, and in 1949 acquired the Gilmore block of 78 acres. This latter had not been farmed for a number of years and was covered with willow brush.

One other thing; Mr. Tree firmly believes that every farmer should have a cash crop. "It may often mean the difference between the success or failure of a farm plan," he explains. "In Ontario they have their fall wheat which brings in some ready cash. In Quebec we should have a crop that will bring in ready money too." Mr. Tree, himself, grows gladioli, which he sells on the Montreal market. "Without the revenue from these flowers," he says, "we could never have done what we have in so short a time."

"When did you first become interested in grassland farming?" I asked Mr. Tree. "A few years ago," he explained, "my daughter and son-in-law gave me a copy of "Malabar Farm," by Louis Bromfield for a Christmas present. The book intrigued me," he said, "the further I read into it, the more interested I became. Then the idea came to me—If Bromfield can do it, why can't I?" So with limited resources in both land and money Mr. Tree set to work to plan the enterprise.

These plans did not include costly forage harvesters or the construction of additional upright silos. The job had to be paid for out of current farm revenues. This, of course, called for a trench silo. On trench silos, Mr. Tree has definite ideas, he feels that too many of them are situated too far from the barn, and this means a lot of extra work during the winter when the temperatures are sub-zero. He, therefore, scouted every nearby site, and finally came up with one on the north side of the loafing barn. Costs were cut right away when he was able to use one wall of the loafing barn as one wall of the silo. In addition the closeness to the barn meant a minimum of time lost in transporting the feed from silo to animals while the permanent roof over the passage-way meant protection from the elements. Length of the silo is 55 feet, width at the top 14 feet, at the bottom 12 feet, with a depth of 9½ feet. Mr. Tree estimates that they can pack 78 loads in when it is filled to capacity. It is built over a sloping shelf of slate which acts as a natural drainage channel.

Raising the silo roof prior to filling is an easy job that does not take much time.



Building the silo onto the loafing barn meant a big saving in expense and made feeding a lot easier.

The silo was dug out with a bulldozer, and the earth piled along the one side wall and in front. The build up along the side wall forms a convenient platform from which to unload the grass into the trench. The silo is covered by a roof which is hinged onto the loafing barn. This roof is raised when the silo is being filled. When the operation is completed the roof is lowered and the silage requires no further cover for the rest of the winter. The raising and lowering is carried out by means of a

Filling The Silo

The team kept a couple of swaths ahead of the loader. Two men are loading here, but one man can handle the job easily enough.

block and tackle attached to a tripod, the whole operation taking only a few minutes.

When I saw the silo during the last week of June, it had taken 48 loads, mainly red clover, alfalfa and timothy, and was level with the retaining wall. Two days of rain held up further filling operations and in this interval the level dropped a good three feet and it hadn't finished settling yet. Mr. Tree uses no preservative of any sort and the cattle relish the feed throughout the winter. Their milk production remains high and they use a lot less grain.

For the harvest operations, Mr. Tree uses his ordinary haying equipment. A team and mower cut the grass keeping a couple of swaths ahead of the loader. A rake is used only if the grass is thin, otherwise he does away with this operation entirely—loading straight from the swath. He figures the hay loads better this way. "There is not as much bunching when the rake isn't used," he says, "and that makes the load easier to throw off into the silo. The only heavy work involved is at this end," he continued, "and care in loading also is a factor in easing this work."

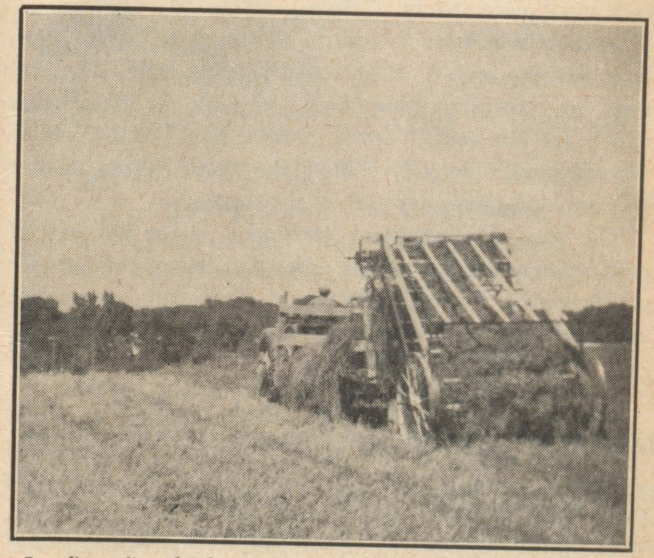
Three men are all that is needed to harvest the grass. One man with the team and mower, one driving the tractor and one loading the wagon. One man can throw the load off while the other spreads it over the silo. Then twice each day the tractor is used to pack the silo, running over it thoroughly from end to end.

In addition to the trench silo, Mr. Tree has a vertical silo which he usually filled with corn, but into which he is going to put his second cut, chopped with a corn chopper. This will necessitate the placing of a few extra hoops around the lower section of the silo in order to enable it to withstand the additional strain from the heavier silage. While the uncut grass is heavier to handle when filling the silo than the chopped, Mr. Tree thinks that it is easier to handle on the feeding end for it requires less handling to get it to the cattle than the chopped grass.

Mr. Tree sticks with Bromfield all the way, not only does he believe that grass silage is one of the cheapest winter feeds, but he also says like Bromfield that there is no alternative to good summer pasture. It is succulent, cheap and provides a good flow of high testing milk when it is properly cultivated. His pastures, therefore, receive a top dressing of hydrated lime, and are kept down to a height of 4 inches. "Cattle won't eat the taller grass," Mr. Tree says, "so we set the mower high and run her over the fields in order to keep them down." He uses electric fences so that the cattle graze only a small section of the field intensively, then they are moved over to another section.

"Cattle," he says, "are the mainstay of any grassland farming operation. They are an essential part of any effort to build up the productivity of a farm." Although he is not much of a livestock man himself, his wife looks after that end of the business, he stresses the point that without a good herd of cows a farm cannot be built up. He has 29 milking Jerseys, all grade cows, but high testing and good milkers. The milkers are kept in stanchions during the winter, but the young stock and the non-milkers are put into the loafing barn.

Building up the productivity of a farm is not easy, it requires hard work and plenty of planning beforehand, but the results attained are well worth the effort required. Our future depends in large measure upon the strength of our agriculture, and it is farmers like Ken Tree who are providing us with that sound base upon which to build for the future.



Loading directly from the swath without raking means a more even spread of the load on the wagon.

Watch Those Weeds

This is the second in a series of articles on the prevention and control of the more troublesome weeds. These articles are based upon information received from the Ontario Department of Agriculture.

PERENNIAL Sow Thistle is one of the worst weeds found in Eastern Canada. Once it is established it is very agressive, and unless quickly brought under control will virtually take over a field. This makes the growing of any crop difficult and in most cases unprofitable.

Sow Thistle prefers moist soils, it thrives on both cultivated and uncultivated fields. Indeed, owing to its habit of growth, normal cultivation tends to spread rather than control it. The weed has long spreading underground rootstocks with many buds. Whenever a root is cut, growth is started at the root bud and new plants develop.

The long, prickly cut leaves with the lobes pointing toward the stem, spread over the surface of the ground and smother plants growing nearby. The flower heads, held up by tall, slender and almost leafless stems appear like large dandelion heads with their bright yellow colour. When the seed head forms, it too, resembles the dandelion ball of fluff and is spread far and wide by the wind.

For a resistant weed such as Perennial Sow Thistle, too much emphasis cannot be placed on controlling it while it is still in small patches. Improved drainage and intensive cultivation provide the best method of control. In regard to the latter suggestion, the spring tooth harrow is to be recommended as it brings the roots to the surface where they dry out and die. The disc harrow, however, should not be used on this weed as it cuts the roots and spreads them. In this way new plants will start from each small piece of root.

2,4-D can be used to control the top growth, applying it at the rate of 6-8 oz. of actual acid per acre. This will assist in controlling this obnoxious weed in grain crops which are not seeded down. Several applications will be necessary to completely control the weed, as this amount will only kill the top growth of the thistle.

The need for persistent treatment, either by way of cultivation or chemicals, in order to remove this menace of Perennial Sow Thistle from our farms cannot be emphasized too strongly.

Goat's Beard

Yellow Goat's Beard, also called Meadow or Wild Salsify, is a common weed on the roadsides, railways and vacant land. While this weed is seldom found in grain fields, it is a menace to our hay and pasture fields. If the infestation is serious, the only way to rid the fleld of it, is to plow up the land.

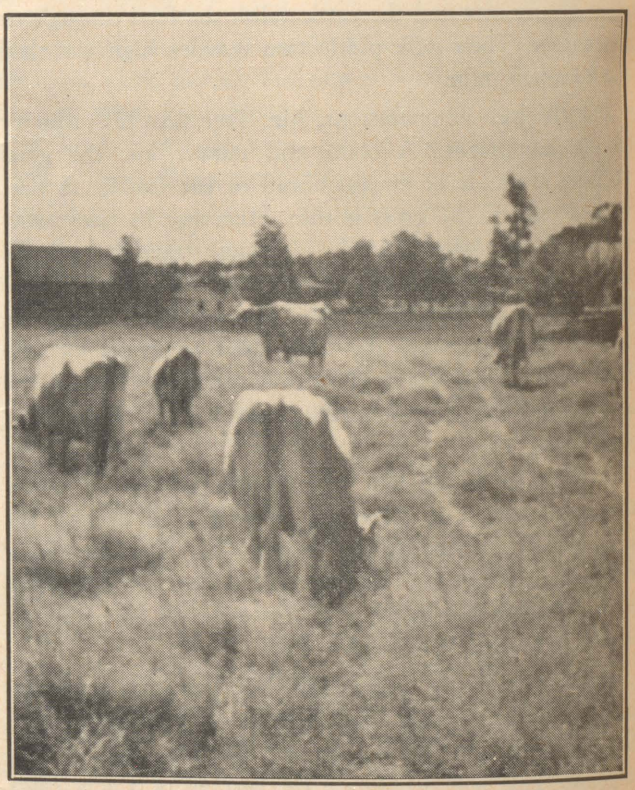
Goat's Beard is a deep-rooted perennial with a tap root. It grows erect often reaching a height of three feet. Large yellow flower heads make it conspicuous when in bloom. The seed head which follows, resembles the dandelion with its downy seeds. These seeds are yellowish brown, long and slender, and are spread by the wind.

Since this weed is seldom found in grain fields, it appears it will not stand cultivation. However, the roadsides, railway rights of way and permanent grasslands provide an ideal place for it to grow undisturbed. To control the weed on such land, it should be cut before the seed sets. This will prevent further spreading of Goat's Beard.

For chemical control, repeated applications of 2,4-D are necessary. It should be applied at the rate of 6—8 oz. of 2,4-D actual acid per acre with the first application made before the flowers appear in June. Since Goat's Beard is a perennial with a deep tap root, several applications will be necessary to completely eradicate this weed. The fact that the seed is spread by the wind, makes further infestations likely, unless it is controlled in the whole district.

Field Bindweed

Field Bindweed (sometimes called Wild Morning Glory) is the most difficult of all weeds to eradicate, once it has become established in a field. In fact there is probably no other weed threatening the farmer with such a loss as Field Bindweed. It is even harder to kill than



These cattle have to do a lot of foraging to get a square meal with consequent loss of milk production.

Perennial Sow Thistle even though the seeds are not as widely dispersed by the wind. It thrives in both wet and dry seasons and, once it is established in a field, no crop will grow. These facts alone should lead the farmer to take steps to prevent its introduction to his farm.

Bindweed has extensive, creeping, cord-like root stocks which penetrate the soil to a depth of four feet or more. Any root stock possessing one or more buds is capable of reproducing another plant. The slender and branching stems either trail on the ground or twine around other plants. There is a resemblance between the Morning Glory and Bindweed, mainly in the shape of their leaves and flowers. The rather small leaves are somewhat arrow-shaped and may have either blunt or rounded tips. The white or rose coloured flowers are funnel shaped and about an inch across. An average plant may produce about 160 seeds which may be distributed as an impurity in cereal grain. However, the usual method of dispersal is by the creeping root stocks.

Patches of Bindweed may be kept from spreading further by working them separately. Chemical weed killers such as 2, 4-D or a sodium chlorate based weed killer also provide a means of control. 2,4-D may be applied at the rate of ½ lb. active material per acre in cereal crops or corn. Spraying several times per year over a number of years may be necessary to completely eradicate Bindweed. Sodium Chlorate weed killers, such as Atlacide or Eroside, at 1½ lb.—2 lb. per gallon per 100 square feet, also gives good control, but may leave the soil relatively sterile for a year or so. These latter herbicides also give effective control when used in the dry form.

Another recommendation is to plant corn or other hoe crops in hills 42" apart so that cultivation may be carried on both ways. When the crop is taken off in the fall, cultivation should be continued as late as possible. Then ridge up the land in drills and allow to stand over the winter. Cultivation should be started as early as possible the following spring, to prevent Bindweed from getting started at that time.

Cultivation is very important during midsummer. Experiments conducted by the O.A.C. have shown that 100% of the root stocks of Bindweed were killed by the sun's rays at this time. Following a hoe crop it is suggested that the field be seeded down to clovers and left as long as it is profitable. In this way, Bindweed will not get a chance to spread further in the sod.

In the control and eradication of Bindweed, perseverance is necessary, if this troublesome pest is to be completely eliminated. The job may take several years, but it will be well worth the effort.

Information Please!

This section should make interesting reading, for it is given over to the problems of our readers. Problems sent in by Farm Forum and other groups will be dealt with here.

ARTIFICIAL insemination of cattle has made great strides since its inception in 1932. There are now organized breeding units in every province of Canada.

Artificial insemination has the distinct advantage of providing all who use its service with a high class sire. There are many farmers who cannot afford to carry a bull of the strain and calibre necessary to produce high producing progeny. To these people and to the small farmer the artificial breeding unit has come as a great boon.

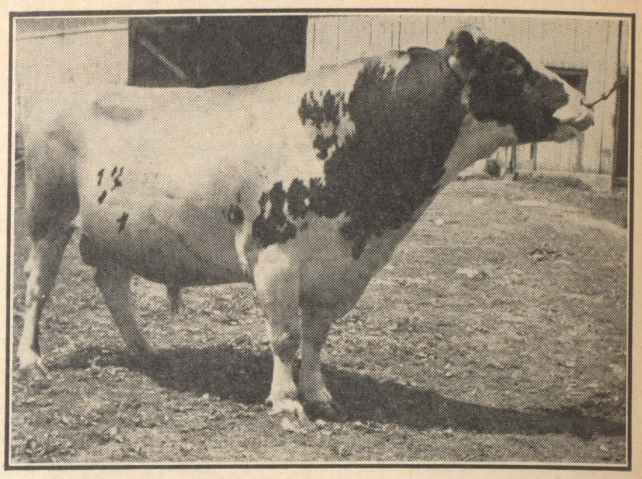
Many enquiries have been received in this office on these breeding units. What is their function, and just how good are they? The following information has been provided by the Federal Department of Agriculture.

The general application of artificial insemination has not been limited to Canada. Great progress has been made in European countries and in Great Britain and the United States. Apart from two or three countries in Europe the greatest development has come in the last seven or eight years.

The function of an artificial insemination breeding unit is relatively simple. First to secure the conception of breeding females within the area in which it operates; second, to apply to all the herds serviced, the breeding practices which a good breeder applies to his own herd. This means to arrive at, and maintain, a reasonably high average of production for the herds in the district. The first function has been fairly well met by the scientists, but much still remains to be done in the second field.

A good cattle breeder knows his cows and what they can produce. He can gauge their production closely without recourse to figures and records. These are necessary of course as proof to others, but not necessarily to himself, for he is constantly aware of his herd's capabilities. In other words, the good breeder can wait a while for official figures without impairing his breeding plan. But in breeding cattle artifically, where hundreds of cows are serviced from one breeding stud, this is not the case. It is essential that returns be tabulated immediately if the unit management is to be in a position to function successfully.

Another matter awaiting development is the provision of a directed service whereby a freer choice in the use of individual sires would be provided by placing semen in individual bottles.



If artificial insemination units are to be a success, they should concentrate on the use of good bulls like this one.

A certain percentage of cows on representative commercial farms serviced by a breeding unit should be check-tested for production to gauge the ability of new sires in maintaining or increasing the milk flow. This would furnish a continuous and automatic method of testing and proving the performance of new bulls as they are posted for service in a unit. In order to be satisfactory such records would need to be accurate, economical, and prompt, so that the management could act quickly on the further and increased use of good bulls, and the curtailment or discontinuance of service by inferior breeding animals. In this way the efficiency of breeding management in the unit would compare with that of the well managed good breeder's herd as nearly as possible.

Assuming that a directed service of supplying individual semen can eventually be provided, another feature which would help, would be a local show where get of sires classes from the various bulls could be on display. This would give livestock owners who were using a unit's service a more complete guide to the productive capacities and general desirability of the progeny from different bulls, and give them a chance to guide the breeding plans in their own herds more efficiently.

The final matter which should be kept in mind is the factor of longevity. This of course is secured by maintaining the same females on record throughout their lifetime and using their progeny for breeding animals. The longevity index, is one of the most important, and probably the most overlooked quality in our dairy herds today. Directing a breeding plan toward long-lived high-producing individuals means that a smaller number of animals are carried for replacements, that there is greater scope for selection, and that the net result will be a decided gain in efficiency with a higher economic return to the district at large.

Save Those Dollars

by D. S. Blair and S. H. Nelson

It's the crop that is picked from the trees not the ground that pays a dividend. The annual dropping of apples just before harvest results in the loss of thousands of dollars to the apple grower. This article gives some pointers on how to put those dollars in your pocket.

THE pre-harvest drop in apples appears to be due to the early formation of the abscission layer responsible for the normal fall of fruit. With certain apple varieties it has been shown that the abscission process involved in the pre-harvest drop of nearly ripe fruit does not involve cell division but is merely the separation of the cells.

The onset, degree and duration of the pre-harvest drop are influenced by the weather, location, orchard management and other characteristics. In Eastern Canada the prolonged high temperatures during the McIntosh season usually results in a heavy drop. The occurrence of drop becomes less in areas of cooler temperatures. Furthermore it has been noted that where an increased crop occurred from increased nitrogen application an increase in the pre-harvest drop occurred. Good tree sanitation and pruning will also help to reduce the amount of pre-harvest drop.

Possibly no discovery has awakened more interest in the field of horticulture than the finding of a chemical which would reduce this pre-harvest apple drop. In 1940 widespread interest was aroused by the experimental work being carried on in Canada and the United States. Commercial companies were quick to make available these growth regulating substances in both liquid and dry form ready to add to the spray tank.

Since this work, many other chemicals have been used for the reduction of the pre-harvest drop in apples, 2,4-D, has given results on Winesap, Stayman and possibly other varieties of the Winesap group. If the trees were not sprayed too early, no harmful effects on any part of the plant was observed from a 10 p.p.m. concentration. A closely related compound 2-methyl,4-chlorophenoxyacetic acid has been reported as being effective in controlling the pre-harvest drop of Duchess, McIntosh and Northern Spy when used at concentrations of 20 p.p.m. and 30 p.p.m. Quite recently, 2,4,5-T has given very encouraging results, but, as yet, it cannot be commercially recommended until the possibility of immediate or permanent injury has been further investigated.

Growth regulating substances when used to reduce the pre-harvest drop in apples are applied in either spray or dust form in either the spraying or dusting equipment used for fungus or insect control. Since the amount of chemical used in the sprays is very small, thorough agitation is essential. As in all spraying operations, the effectiveness of the material used is dependent upon good coverage; the best results being obtained when enough spray is applied to "wet" the entire tree. Studies concerning the transmission of the effect of naphthaleneacetic acid have shown that the chief means of transporting the spray stimulus responsible for slowing fruit drop is the foliage. Therefore, thorough spray coverage is necessary in order to obtain the most effective results from these sprays.

Correct Timing Important

Time of application is a very critical factor in the effectiveness of the commercial preparations containing naphthaleneacetic acid or closely related hormones. These hormones are more effective when applied during the warmest part of the day, but the period of effectiveness is longer when cool weather prevails following application. Since, under average conditions, the spray becomes

This is a Crimson Beauty apple tree which has been sprayed with naphthaleneacetic acid. Although the fruit is cracked and overmature it is still clinging to the tree.

effective within two days after being applied and reaches its peak in four to five days, a spray applied too early, especially on McIntosh, may lose its retarding effect before the crop is harvested. Best results are obtained, especially with McIntosh, by waiting until a few good size apples which are free of insect injuries have dropped to the ground. Since the newer sprays have a longer period of effectiveness, timing does not appear to be as important as with the naphthaleneacetic acid sprays.

No extreme effect of the commercial spray preparations containing either naphthaleneacetic acid, the sodium salt of naphthaleneacetic acid or naphthaleneacetamide as the active agent has been recorded on either fruit or foliage. Apparently the delay in abscission is only a temporary one and leaf fall takes place at the normal time. However, the fruit abscission is delayed sufficiently to allow a better colour to develop. This improved colour is perhaps an even more important feature than preventing fruit drop, since "Extra Fancy" grades are becoming more and more in demand. The grower must exercise extreme care in the use of these growth regulating substances to attain fruits of better colour, since the fruit may be left on the tree too long and be over-mature for proper storage. This spray hastens the maturity of summer apples, but apparently has little or no effect on the fall and winter varieties. This is of great importance since it results in a considerable saving in the picking of summer varieties. 2,4-D is reported to be specific to the Stayman-Winesap group of apples and may be applied to this group with complete freedom from any type of injury providing that the concentration used is not over 10 p.p.m. and that it is applied approximately three weeks prior to anticipated drop. Concentrations over 10 p.p.m. and formulations containing the ester should be avoided in commercial application.

With regard to materials, 2,4,5-T and 2,4,5-T.P., more information is necessary. 2,4,5-T has been reported to advance maturity. However, yellowing of the leaves was present where the concentrations of 2,4,5-T were sufficient to induce early fruit maturity. Although 2,4,5-T.P. is generally reported to have no effect on the foliage, recently Fisher at the Summerland Experimental Station in British Columbia reports a delay in leaf drop.

Varieties do not react alike. Harvest sprays are generally more effective on the summer than on the fall varieties. The relatively high temperatures prevailing when the summer apples reach maturity are considered the main contributing factors. Melba and Yellow Transparent, for example, respond well to these sprays, while McIntosh is inconsistent in its response. There are, nevertheless, varietal differences which appear to be associated with certain structural characters. For example, an apple with a long flexible pedicle will swing back and forth without as much strain to the point of attachment as an apple with a short, stout pedicle.

These apples have been well sprayed with a compound, and although cracked are still clinging to the tree.

Some Trees are Different

Individual trees vary in their response to these growth promoting substances. Trees suffering from such disturbances as leaf scorch and winter injury do not respond to these sprays. Rainfall is also a factor and in relatively dry years these sprays are less effective. In short, any disturbance which affects the normal development of any apple tree will also have an effect on the transmission of the growth regulating substances through the plant.

Experiments with harvest sprays were started at Ottawa in 1939. Preliminary trials on pot trees in the greenhouse in the winter of 1939-40 were so significant that large scale orchard tests were conducted. Two commercial preparations, one containing naphthaleneacetic acid and the other containing naphthaleneacetic acid plus naphthaleneacetamide gave essentially the same results and reduced the drop on a group of varieties which included Crimson Beauty, Yellow Transparent, Melba, McIntosh, Wealthy, Joyce, Honora, Brisco, Lobo, Stonecrop, Dudley and Gilda. It was observed that the sprays were more effective on summer than fall and winter apples. The period of effectiveness varied with varieties. With McIntosh the period was one week as compared with a two week period with Crimson Beauty, Melba and Yellow Transparent.

Although most varieties in Canada respond favourably to naphthaleneacetic acid, the sodium salt of naphthaleneacetic acid or naphthaleneacetamide, it has been found that McIntosh does not respond to treatment in some seasons, while in others the effectiveness is short-lived. 2-methyl,4-chlorophenoxyacetic acid was tested in 1948 at Ottawa and Trenton and was very promising on McIntosh. In 1949 it was only equal to the sodium salt of naphthaleneacetic acid, but in 1950 it was inferior.

Investigations with 2,4,5-T and 2,4,5-T.P. were carried out during the summer of 1951. Crimson Beauty and Melba trees growing in pots in the greenhouse were

sprayed prior to harvest in mid-summer and the apples remained on the trees until they became mealy and split.

In orchard tests at Ottawa 2,4,5-T.P. proved to be quite effective on Melba and its red sports. Not only was there a very noticeable drop control, but also an increase in colour. The effectiveness of the chemical was less apparent on the McIntosh variety. There was a noticeable drop control when the trees were sprayed seventeen days prior to harvest, but the effectiveness was less apparent when the sprays were applied closer to harvest time. Early applications gave the greatest increase in the number of "Extra Fancy" McIntosh apples and there appeared to be a positive relationship between time of application and colour improvement. However, this increase in the "Extra Fancy" grade was at the expense of the "Fancy" grade and not the "C" grade as would be expected.

The McIntosh apples were placed directly into 32°F. cold storage and their behaviour studied. Texture and flavour ratings of the treated apples were below that of the check trees. However, no correlation between time of application and the texture and flavour ratings could be made. Although the occurrence of fungal rots in the different treatments were closely grouped, there was a positive relationship correlation between earliness of application and high fungal rot occurrence. The check had the least fungal rots. Conversely, the check trees had the greatest percentage of sound fruit and the earliest treatment the least. The effect of the plant growth substance spray on coreflush and breakdown occurrence in storage showed no significant relationship between the treated and untreated trees.

Green Embankments

A new machine which can blow top soil, fertilizer, grass seed, oat seed and peat moss on steep highway embankments in a single operation has been developed by a Quebec City engineer in co-operation with a horticulturist from Cap Rouge, Que.

The machine is powered by gasoline motors and is mounted on a five-ton truck. It is capable of seeding from 400 to 600 square yards of embankment an hour, according to C-I-L Agricultural News.

The mixture is prepared a week to 10 days in advance of seeding operations. Peat moss, oat seed and a portion of the top soil are first machine-mixed in proper proportions, then set aside in piles to germinate. When the oat seed shows signs of growth, the mixture is ready for use and is fed to a second machine on the blower truck. Grass seed, more top soil, fertilizer and some clover seed is added and dropped through a rotary air trap into a long flexible air-blower tube which sprays the mixture on the embankment.

A watering truck with a long garden hose equipped with a spray nozzle follows the seeding truck and wets down the embankment as soon as seeding is completed. Sprinkling is continued at frequent intervals to prevent the mixture from being blown off the embankment. Spring rains had little effect except to speed up the growth of grass.

Last fall several hundred thousand square yards of pulverized shale embankment were seeded with this blower. Today, the area carries a thick, luxurious growth of grass. The oat shoots died off during the winter leaving their roots deeply imbedded in the shale which serve to hold the grass in place and prevent erosion.

Happy Anniversary

Two Canadian-made chemical products are celebrating anniversaries this year. One is the man-made fibre nylon; the other the transparent cellulose film called "Cellophane". The nylon plant at Kingston, Ont., went into production 10 years ago. Manufacture of "Cellophane" began at Shawinigan Falls, Que., in 1932, making this year the 20th anniversary of the product in Canada.

Back of each were years of research and experiment. It took $27,000,000 and 10 years of work by a corps of scientists to develop nylon. It was first successfully used in the form of bristle for toothbrushes. A yarn suitable for women's stockings was then developed and, in 1940, the first nylon hose went on sale in the United States. Construction of a Canadian nylon plant began the same year and, in 1942, the plant was in production.

As its unique qualities became better known, nylon, in yarn, staple fibre or plastic form, was quickly adopted in other fields. Today it is used in hundreds of products found in the home and factory ranging from flimsy lingerie to hard-wearing lariats for roping cattle.

"Cellophane" was first developed in 1908 by a Swiss Chemist, J. E. Brandenberger, and until 1924 was produced only in France. It was used for wrapping expensive luxuries. A U.S. plant was opened in 1924 and the Canadian one eight years later.

Before the advent of "Cellophane" on this continent stores were cluttered with boxes, bags and bins from which goods were measured out with a scoop or counted by the handfuls. Bulk goods were open to the air, dust and contamination. The new transparent film speeded the development of the self-service super-market of today where customers help themselves to pre-packaged merchandise protected yet fully visible to the shopper.

DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec Department of Agriculture

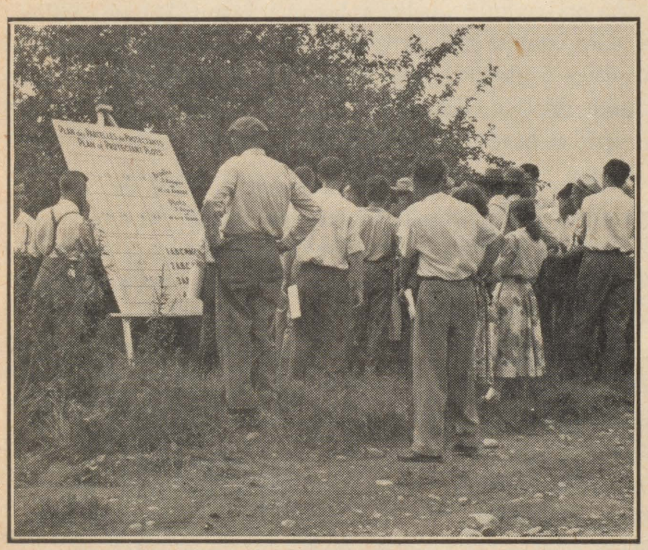
Rougemont Is Host To Pomologists

Members of the Quebec Pomological Society returned to Rougemont for their 1952 summer meeting, which was held at the orchard of the Oblate Fathers, high on the slopes of the mountain. This fine orchard of 6500 trees in bearing is being used, in part, as a field laboratory by the Federal Government, where Messrs. A. A. Beaulieu and L. Cinq-Mars are carring on experimental work on orchard spray materials and techniques.

The first item on the programme was a visit to the recently-built cold-storage plant, an imposing two-storey building 100 feet long and 60 feet wide which is even so just large enough to take care of a normal crop from the orchard. A picnic lunch under the trees on the spacious grounds surrounding the buildings followed, when Father Jodoin welcomed the guests and described briefly the steps that had led to the building of the storage plant and told something of the organization of the orchard.

Main business of the day was a review of crop prospects by President Duchesne and Vice-president Palmer. The most recent figures they had been able to get together put Quebec's crop at about 60% of last year's, with the greatest reduction in the late apples. This is the provincial average, but in some districts the crop will be much less, and likely of only fair quality. Both Mr. Duchesne and Mr. Palmer made strong pleas for orderly marketing; if the MacIntosh can be kept off the market until the early crop has been disposed of, there should be no difficulty in getting rid of the crop at decent prices, and with the increased cold-storage facilities that the growers have at their disposal, this should not be difficult to do. There is no point in bringing MacIntosh on to the market before the tenth of September, and the growers were urged to hold back the winter apples until that date at the earliest.

It was a long, hot climb up to the orchard, but most of the people went along.



Big posters made it easy for the crowd to see just what treatment had been given each of the plots.

Marketing problems, with such a small crop, may be expected to be fewer, but the executive had decided to go ahead with the radio advertising campaign just the same, though perhaps on a somewhat reduced scale to what had been planned earlier. Repetition is the heart of any advertising campaign, and they thought that with the good start that had been made in past years, the programme shouldn't be dropped entirely, even for one year.

There were no guest speakers at this meeting, and the usual demonstrations of machinery and materials were absent. Messrs. Beaulieu and Cinq-Mars described the work they were doing in insect and disease control, using different materials put on in different ways, both in the Oblate Fathers' orchard and others in the area. Following their talks, the crowd was taken on a tour of that part of the orchard where the experiments were in

progress, and the growers were able to see for themselves, with the aid of maps and signs in the orchard, what the trees that had received the various treatments looked like. They also had a chance to see what would have happened had no spraying been done at all, for some of the trees had been left untouched all season, with obvious results.

It is known that air temperature during and just after a rain has a lot to do with scab infection, and spray tables have been drawn up to help the grower decide just how long he has, after it stops raining, to get a protectant spray onto his trees. To check this point, Mr. Cinq-Mars had devised a method of covering entire branches with pliofilm bags to protect the foliage from rain. A branch would be uncovered at the start of a rain, and the progress of scab infection was watched on this branch. In this way it was possible to know just what infection had occurred following any given period of rainfall, and to correlate this with temperature conditions at the time. This was demonstrated as a matter of interest, though it is too early in the work to make any definite report.

By enclosing a branch in a pliofilm bag, thus protecting the foliage from rain except when the bag is removed, plant pathologists can determine the relation between length of rainfall and temperature on scab infection.

It was a very well-attended meeting with over 300 present though the day was one of the hottest of the summer. The orchard is high above the surrounding countryside and the climb up the hill to the experimental plots was a hot one, but most of the people went along just the same. A trip to the Rougemont processing plant had also been planned, but by the time the guests had gone through the orchard and had come back to headquarters the afternoon was well along, and most of them were content to rest in the shade for a few minutes before starting for home.

Classification Of Chicks

An understanding recently arrived at between all interested parties has defined the classes of chicks which may be produced only by R.O.P. breeders, that is, those whose flocks are under official egg-laying control supervised by the Federal Department of Agriculture.

Government approval of any R.O.P. breeder's establishment is obligatory, and certification is optional; but by agreement between the Quebec and the Federal Governments, all R.O.P. flocks and hatcheries in Quebec are also certified.

Breeders' classes of chicks are as follows:

Class 1: R.O.P. Pedigreed approved and certified chicks—chicks or poults from R.O.P. hatching eggs. The chicks or poults are identified by a numbered wing band bearing the letters R.O.P.

Class 2: R.O.P. approved and certified female chicks—from R.O.P. sires and hens in their first laying year, on R.O.P. but not yet qualified. They are identified by a wing band bearing the inscription R.O.P. Female.

The next three classes are those which may be produced by commercial hatcheries. These chicks are not wing-banded.

Class 3: R.O.P. bred chicks, certified or approved, are the result of matings of R.O.P. sires and R.O.P. females.

Class 4: R.O.P. sired chicks—from R.O.P. sires and selected females which are not on R.O.P.

Class 5: Approved or Certified chicks—from matings or selected parents which are not on R.O.P.

The designation "certified" indicates that the chicks come from certified flocks or hatcheries, that is to say, those that have met the conditions of the provincial certification policy, which includes selection, blood testing for pullorum disease in the breeding flock, and constant supervision by Provincial Government inspectors throughout the incubation period. "Certified" chicks can be bought with assurance of health and vigour. Certification is optional for hatchery owners, but is obligatory if the word "certified" is to be used to describe or advertize chicks for sale.

The designation "approved" means that the flocks and hatcheries have been approved under the provincial policy. The requirements are about the same as for certification except that the policy is administered by Federal inspectors. This is at present obligatory for all R.O.P. hatcheries, and also for hatcheries which sell chicks or poults outside Quebec or Ontario.

In other words, a commercial hatchery in Quebec may be either certified or approved or both at once. If it is neither, it may not use the terms "certified" or "approved" to describe its chicks.

Getting A New Viewpoint

More and more agronomes of the Provincial Extension Service are making use of organized excursions or study trips to give the farmers they serve the opportunity of seeing for themselves how other farmers, in other parts of the province, do things. Travel is broadening, as the advertisements say, and these organized trips make it possible for the individual farmer to go to places it would be too expensive for him to visit if he went on his own. And what the farmer sees on one of these trips, he remembers much more clearly, and understands better, than if the same information were presented to him in a talk, which would likely be interlarded with figures and statistics he never possibly could sort out and remember afterward.

A favourite destination for these excursions is the Experimental Station at Lennoxville, which has been visited by a number of groups this summer. Here, though the visitors are interested in the dairy herd, the pasture work and the experimental plots, the main point of interest seems to be the grass silage programme carried on at the Station. The loafing barn is also a source of interest, especially to those, and there are always some in any group, who are about to remodel or build a barn at home. A group of over 300 persons from Dorchester County, accompanied by Agronome Maurice Dirren, made one such visit last month.

Ulysse Potvin organized a trip for some of his farmers to the Artificial Insemination Centre at St. Hyacinthe, where they also saw the Veterinary School and the Dairy School. Earlier in the summer he took several hundred members of the Young Farmers Club of his district on a tour of historic spots of the province.

Some 450 members of farmers clubs of Laval and Jacques Cartier Counties went to the Central Experimental Farm at Ottawa with Az. Lafortune, where they were entertained for dinner at the University of Ottawa. Dr. E. S. Hopkins took them over the Farm, pointing out that the Experimental Farms Service carries on a lot of work in Quebec through its branch farms and stations, such as the one at l'Assomption where the emphasis is on horticulture and tobacco growing, the muck soil investigations at Ste. Clothilde and in Gaspé, and the stations at Lennoxville, Ste. Anne de la Pocatière and Normandin.

The Deschambault Farm-School, which is operated by the Provincial Government, is usually thought of in connection with field crops and livestock farming. But 25 of its 375 acres are used to grow vegetables, small fruit, medicinal plants and those that can be used industrially, for tests as to suitability of varieties and so forth. There are also extensive poultry ranges and an apiary.

These branches of farming are traditionallly of interest to the women folk, and the Farm-School invited some 200 farmers' wives and daughters to look the place over. They came from the counties of Dorchester and Levis, and were accompanied by three county agronomes, Messrs Michel Rousseau, Zachee Roy and Maurice Dirren, who organized the trip.

On their tour of the farm with the Director, Mr. Andrea St. Pierre, as their guide, they were particularly interested in the different varieties of tomatoes, strawberries and raspberries, and in the medicinal and ornamental plants. They were also much impressed by the ornamental planting around the Manoir Boudreau, a house which dates from the days of the original French colony, which has been restored by the government, and from which they got some good ideas on how to beautify their own homes.

No one comes home from one of these trips without having learned something of practical value to his own farming operations, and sometimes just the new viewpoint, or the chance to discuss a problem with someone who is doing things a little bit differently, answers a question that has been puzzling him for a long time.

Storage Sanitation

It is this time of year that operators of fruit and vegetable storages should be thinking of a clean-up program. Too frequently decayed produce, broken boxes, soiled wraps, and other debris from the previous season is left around throughout the summer. Just before the new crops are harvested a hasty attempt at cleaning up is made—the trash going out at the back as the fresh produce comes in at the front!

Such a practice is not only detrimental to the fresh produce, but to the building as well. The decayed produce breeds moulds and other organisms, causing musty smells, which penetrate the insulation and structure generally and soon give the stored product a musty or "storage" smell and taste. These organisms also affect the building and cause rotting and disintegration of wooden parts.

Storage experts of the Department of Agriculture state that there is no substitute for cleanliness in combating these storage problems. In order that fungicides or germicides get a chance to do their job the storage must be thoroughly cleaned. After clearing out the debris, a scrubbing brush, soap and water, and hard work, is the best cleanser. In storages where steam is available, the task is easier.

When the storage is thoroughly clean, a fungicide can be used. Salts releasing chlorine are helpful in freshening up the storage. After spraying, the storage rooms should be closed for several days to permit penetration and then ventilated continuously with fresh air until the storage season begins.

2-12-6 and 4-8-10 Mixtures Disappear

As from the 24 of June, no fertilizer of the old familiar 2-12-6 and 4-8-10 formulas may legally be sold in Canada. The disappearance of these two mixtures is the result of representations made to the Federal Government by the Fertilizer Boards of Quebec and Ontario recently.

Agronomes in both provinces have been pressing for some time to have these two mixtures removed from circulation, but during and after the war the supply of fertilizer components was too uncertain to allow anything to be done about it. Both these mixtures contained too much filler, which might be lime or sand, usually the latter, to be economical. Every ton of 2-12-6 would contain as much as 400 pounds of filler, while there would be up to 500 pounds of useless material in a ton of 4-8-10. But this filler had to be handled just as many times as the fertilizer material; it had to be stored by the manufacturer, dried, weighed and mixed and bagged. The farmer, for his part, who bought these mixtures had to pay freight on it, store it, spread it on the fields, where it did absolutely no good. All this cost money which came out of the farmer's pocket.

2-12-6 can be replaced with either 2-16-6 or 2-12-10. The 2-16-6 will find most use on clay soils, 2-12-10 is preferable for sandy soils.

A 5-10-13 mixture replaces the old 4-8-10; it contains the same proportions of N.P. and K. and is 25% more concentrated. In other words, 4 pounds of 5-10-13 contains as much fertilizer material as 5 pounds of 4-8-10. A man who used to apply 1000 pounds of 4-8-10 need use only 800 pounds of the new mixture—four-fifths of what he used to use.

The Quebec Fertilizer Board estimates that savings to farmers by the use of the more concentrated formulas will amount to at least $200,000. These were old favourite formulas, something like 80,000 tons being used in Quebec each year. Farmers were in the habit of using them, but it was an expensive habit. The Maritime Provinces gave up these mixtures two years ago, much to their advantage, and with this move in Quebec and Ontario the discontinuance of these weak mixtures is now general throughout eastern Canada.

Farmers Are Good Credit Risks

According to its report for 1951, the Provincial Farm Credit Bureau has made, during its seventeen years of operation, loans to 34,521 farmers to help them operate their farms successfully and educate and, in many cases, establish on farms of their own, their 133,500 children.

According to its report for 1951, the Provincial Farm Credit Bureau has made loans to 34,521 farmers in the seventeen years of its operations. These loans have helped these heads of families to get their farms into proper condition, and have contributed, indirectly, to the raising, educating and, in many cases, establishing on farms of their own, 133,500 farmers' children. Of the total of 34,521 loans, 12,722 were made to young farmers anxious to start farming on their own, and there are another 728 such loans pending. A total of $96,000,000 has been voted for these loans by the legislature, of which $85,931,120 had been loaned by the end of 1951.

And of all this money that has been loaned, only $194.81 has had to be written off to bad debts — truly a remarkable record, which pays eloquent tribute to the innate honesty of the farmer and his determination to repay his debts. Payments have been made promptly as they fell due, and in a great number of cases the debt has been paid back before the time limit had expired. The Bureau reports that it has received some $15,000,000 in advance payments.

There appears to be no doubt that this policy has been responsible to a considerable degree for keeping many farmers on the land. And it is not only the farmers that have benefitted. Indirectly, many municipal corporations, school boards, etc. have profited by the farmers' ability to pay their taxes. Insurance companies have been able to keep the farmers' property protected. Truly, this assistance has helped the whole province.

They've Done It At Last!

Many a time we've stopped to mop our brow while cutting the family lawn to wish that someone would invent a grass that would grow to the right height and then stop. Well, they haven't done quite that, but they have done the next thing—developed a chemical that you can spray on your lawn to keep the grass from growing too fast, without spoiling its thickness or its colour.

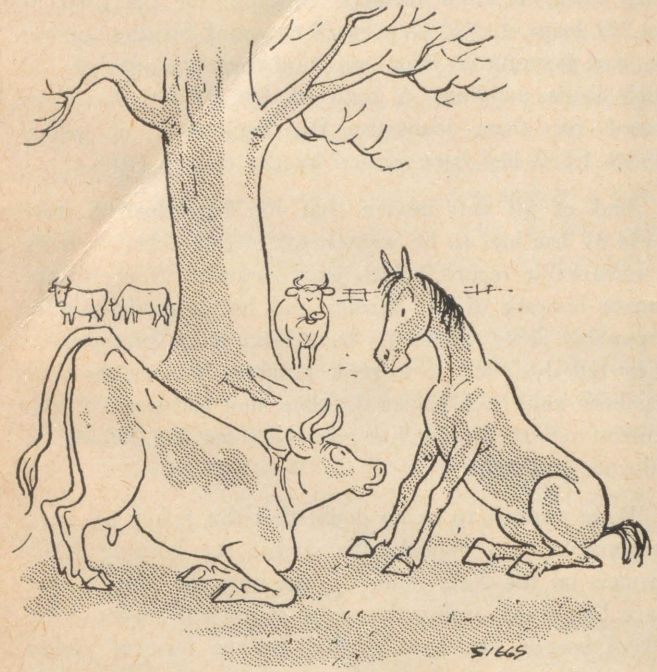
A recent news release from Naugatuck Chemicals tells of tests they have made with maleic hydrazide and its ability to slow down the normal rate of growth of grass. The stuff was tried out on 55 different stretches of lawn in the States, totalling 74 acres. The treated grass was sprayed twice, on May 2 and May 3, and had to be cut only twice all summer. Adjoining plots, not treated, had to be mown 19 times to keep them tidy.

One place where this treatment could be used to advantage is on the strips of grass which divide double-lane highways. It cost $10 an acre to spray the grass, but the investigators figured that the savings in labour through not having to cut the grass more than twice during the summer amounted to $70 per acre.

A professor of mathematics explains how to wash a car with . . .

Two Buckets of Water

There's always a better way . . .



"No, no. Pardon me—this is the correct way to get up."

MOST people, when they set out to wash the family car, turn on the hose full blast and deluge car and surroundings with water; and then are amazed to find that the force of the stream is not enough, but that the surface must be gone over with a sponge or cloth. In dry weather when water it at a premium, car washing comes next to lawn sprinkling on the banned list. But this is no excuse for neglecting to keep the car clean, for it can be washed easily and effectively with only two buckets of water.

To properly appreciate the procedure, one must understand some elementary principles. First, the dirt is stuck to the car, and water alone won't wash it off — it has to be wiped off. If it is wiped while dry the car will be scratched, but it wipes off easily when it is thoroughly wet.

Secondly, every housewife knows that it is easier to wipe up spilled liquid with a damp cloth than with a dry one. When the cloth is damp the surface tension of the spilled liquid does not have to be broken, and the cloth absorbs the liquid as a sponge does. The same principle applies to chamois and sponge. A wet chamois or sponge wets the car. A chamois or sponge wrung to dampness will absorb water. The slogan is simple:

Wet sponge or wet chamois wets the car

Damp sponge or damp chamois dries the car.

We are now ready to begin.

1. Take two buckets. Put a sponge in one and a chamois in the other. Fill both buckets with clean water. Squeeze the sponge and the chamois in the water until both are thoroughly wet. Thereafter one bucket is your sponge bucket and the other your chamois bucket. The water is to be kept comparatively clean throughout the process.
2. We shall do the car, a panel at a time, from the top down. Take the wet sponge, and forget your old habit of splashing water. Wet one panel thoroughly. Pause a moment to let the dirt become thoroughly wet.
3. Use the wet sponge a second time, but this time wipe the surface of the car.
4. Squeeze out the wet sponge onto the ground (not into the bucket).
5. If the sponge is very dirty, rinse it, discarding the dirty water.
6. Squeeze the sponge to dampness and mop up any excess water on the panel.
7. Use the wet chamois (not too wet) on the same panel.
8. Wring out the chamois to dampness.
9. Use the damp chamois with a polishing effect.

Repeat this process for each panel until all the car is washed. In most cases you will find the process easy and quick, and requiring only two buckets of water. For excessively muddy cars I do a quarter of the car with each pair of buckets, finishing off with each wheel. However, even for such a dirty car eight buckets cannot be considered excessive.

Veterinary Topics

by

D. G. Dale, D.V.M.

Midsummer is usually a fairly quiet period of the year for the practising veterinarian, which probably means that there are fewer livestock health problems arising at this time. August weather, however, often brings with it a few conditions that are a source of worry to the farmer.

Many of you will be using alfalfa fields as pasture if the season is dry and many of you will no doubt remember troubles you have had in the past with the cattle "bloating" on such fields. The full story of bloat has not as yet been completely worked out. There are a number of facts that are known however. For instance we know that bloat is due to excessive fermentation of the succulent green feed eaten by the cow. We also know that a certain degree of rumen paralysis accompanies or perhaps precedes this rapid fermentation. Some veterinarians maintain that this loss of adequate rumen motility is due to a lack of mechanical stimulation of the rumen by coarse roughage. Assuming that this point of view is right, it is possible to make a few suggestions that if followed out may lessen the danger of bloating.

1. Don't allow cattle in a new legume pasture for long lengths of time at first. After being on relatively poor pasture they will tend to eat too much and thus overload the rumen unless care is taken. An hour or so at first is long enough.
2. Make sure that cattle have eaten a reasonable amount of coarse roughage before being first turned into succulent pastures.
3. Don't pasture cattle overnight in alfalfa or other legume pastures until they have become thoroughly accustomed to it. Even then it is wiser to pasture them elsewhere at night if another field is available.
4. When cattle have become used to the new pasture and you are planning to turn them out in it all day, it is a wise precaution to place several piles of hay in the field so that they have a source of coarse feed if they desire it.

In spite of all the precautions that we take, it is quite possible that some animals may still bloat. The various home remedies that are advocated for bloat are probably well known to all of you. Keep in mind, however, that it is quite easy to pour the medicine "down the wrong way" into the lungs. This is particularly true in bloated animals so use care, and above all take lots of time if you are drenching these animals yourself.

Oil of turpentine, 2 ounces in a quart of mineral oil, is a reasonably safe and efficient home remedy for mild cases. Animals that are slow to respond to this treatment should be treated by a veterinarian without delay.

Occasionally "acute" bloating occurs and an animal is found "down" and unable to rise. Such animals require immediate and often drastic treatment. Call your veterinarian at once and be sure that he knows the condition the animal is in. If it is impossible to obtain professional help, it is often possible to save the animal's life by "tapping" the rumen to relieve the gas pressure. The animal should be tapped on the left side high up in the flank region where the greatest distension will probably be seen. If you don't have the correct instrument (a trochar and cannula), a clean sharp knife is better than nothing. Even when the emergency is over, it is still advisable to obtain veterinary aid for such cases as many of them die later of peritonitis due to the rumen contents escaping into the abdominal cavity.

FAO Active in Many Countries

The Food and Agriculture Organization has approved and initiated work on 170 technical assistance projects since funds for this work in underdeveloped countries first became available about a year and a half ago. One hundred and fifty-three are projects for improving farming, fishing, forestry, nutrition, economics and statistical services in 46 individual countries, and the remaining 17 are regional projects or training centres undertaken in Asia, Africa, the Near East, and Latin America.

Regional projects cover a wide variety of subjects, including training centres for the appraisal of development projects; plant and animal disease and pest control; training in forest fire fighting, nutrition education, and agricultural census tabulation methods; fisheries training centres; and rice breeding projects.

Country projects are also varied. Ethiopia is getting help in wiping out rinderpest, dread animal disease. In Pakistan a major project involves widespread drainage and irrigation improvement. Fisheries experts are working in Chile and Brazil to expand and improve the fishing industry. A team of forestry experts is working in Thailand to improve sawmill techniques, train personnel to use mechanical equipment, and make a survey of that country's forest resources. In Syria a home economics workshop held recently trained more than a hundred home economics teachers in home-making, child care, home management, nutrition, and food preparation and preservation.

Funds for FAO's technical assistance program come from 55 countries which have pledged $18 million for 1952 for the work of the United Nations and the UN specialized agencies participating in the program. Of this amount, FAO receives 29 per cent for its work in agriculture, forestry, fisheries, nutrition, and rural welfare.

Strippings

by **Gordon W. Geddes**

We got another proof of what cattle think of early-cut hay. George had been giving the calves their hay while I was feeding them milk. It worked all right while it was the old hay, but the first night he gave them some we clipped in the pasture on June 12th, they wouldn't even drink their milk they liked the hay so well. It wasn't the best of hay either as it was from old pasture with quite a few weeds and got rained on some but it was early-cut.

We certainly got a lot of wet weather for a time and it seemed like a record for continuation of such weather. However, it was not a record for total rainfall in June as I believe that came in 1922 with nearly three times as much as in June of this year. It seems as if that might have been the year when my father planted his potatoes on June 11th and that was the first crop planted rather in the mud at that. We finished the seeding on June 18th that year.

When it did decide to stop raining it sure stopped and created a record for recent years in continued good hay weather. The crop improved fast after it got warmer too and there must have been a lot of very nice hay put in the barns around. Unfortunately we were not haying then, we were filling silo. Three farms tried to cooperate in pooling our men and machinery to make silo-filling with clover easier and quicker. It must have been easier but it was not so much quicker as we hoped it might be. The more machinery one uses the more opportunity we have for breakdowns and we seemed to have a little more than our share even flat tires when other things were going well. However, it was an experiment to see what we could do and not so bad an experiment as it might at that. One farm supplied a forage harvester, one tractor big enough to haul it with a wagon behind and one a tractor to haul loads to the barn. We used three wagons, one with wooden wheels which didn't stand tractor speeds so well. In fact it ended up with two different wheels.

The one medium tractor did a good job of keeping up with hauling. Our tractor could easily pull the harvester with a loaded wagon but it wasn't in quite the condition it should have been in to begin with. The forage harvester would have stood some renovating too but the faults were not visible until we began to use it and none of us knew too much about it to start off. The biggest fault was that we should have begun about ten days earlier than we did but the spring was so late none of us were ready. Anyway we learnt a lot and put in about thirty-eight acres of clover in seventy hours. The first two silos we moved back to re-fill but the last one held enough without any waiting.

The other two drove into the barn and shovelled the clover down into the silo. Here we had to blow it into the silo which made extra expense. This was not all wasted as we used the same old blower with the knives in just the same and got a better job of chopping done than ever before. As a result we also got more in the silo than before and we feel that it might be better than ever, though that is still to be proven. Last year we put in eight acres and the scatterings went as hay. This year we got in nearly ten acres and most of the scatterings with it. About eight acres went in with the harvester and then we put in the rest the old way. According to the squeeze test the moisture content seemed to be about right. In dry weather such as we had this year it would be a little harder to keep enough moisture with the hayloader and only three men as we have done it before. But we could not have worked in as wet weather as we often do with the hayloader. It bothers the harvester if it is too wet and those who had to drive into the barn couldn't make the grade when the planks were wet.

Some things we found out might be interesting to others considering the purchase of such machinery. The harvester we used had elevators to carry the material to the wagon, they were better than a blower because we could stop the elevator and go far enough to change wagons. The wagon is always where it should be if it is drawn with the machine. If it is drawn beside it means more men and tractors to haul. It would be a little faster if the unloading facilities would handle it. Otherwise it would be only extra expense.

Some neighbours are trying out the trench silos with uncut clover in them. We are glad to see them do it as we have wondered how it would work but always felt as if we would prefer to have some local person try it first. It seems as if it will come out pretty hard, enough harder to overbalance the ease of putting it in.

After the silos were finished I lost another good hay day working at the poll to see how many of the people on the voters' list used their privilege. The great majority did and gave the government an above-average share of the votes. I came the nearest I ever will to getting elected as one voter put the cross on the back of the ballot in the little space where the returning-officer puts his initials.

THE WOMEN'S INSTITUTES SECTION

Devoted to the activities of the Quebec Institutes and to matters of interest to them

New Era — New Effort

by **Angela W. Evans**

For the 38th annual convention of the Quebec Women's Institutes, over 200 members and visitors from various parts of the province gathered at Macdonald College. There they again enjoyed the gracious hospitality accorded to them over many years. The spacious halls and friendly accommodations, the lovely grounds dotted with flowering shrubs and beautiful trees, some of such unusual variety as to become "conversation pieces", furnish the perfect setting for business sessions and rare periods of relaxation. There returning delegates greet old acquaintances, renew friendships, and welcome warmly the new comers.

On Tuesday evening the opening session was held in the Assembly Hall. Dr. W. H. Brittain, Vice-Principal and Dean of Macdonald College, cordially welcomed the delegates and visitors. Mrs. R. Thomson, past president, graciously expressed the appreciation of the convention for the privilege of holding their meetings at the College. Mr. Emile Gauthier, Director of Home Economics Division, Department of Agriculture, Quebec, brought greetings, and announced that another station wagon was being furnished, this one for the use of the Handicraft Technician, Miss Bruneau. This news was received with great pleasure.

Representatives of affiliated societies present, who spoke briefly on behalf of their organizations, were Mrs. R. G. Gilbride, president Montreal Council of Women, Mrs. H. E. Vautelet, past president Quebec Division Canadian Association of Consumers, Miss Alice Lighthall, past president Canadian Handicraft Guild (Quebec Branch) Mrs. D. C. Munroe, President Macdonald Women's Union and Mr. James T. Davidson, Provincial Secretary, Quebec Council of Farm Forums.

Vocal selections furnished by Mr. N. Cooper, accompanied by Mrs. E. C. Irvine at the piano, were much enjoyed. Mrs. G. E. LeBaron, North Hatley, provincial president, in her address amplified the convention theme, "New Era—New Effort", pointing out that while the basic ideals and objectives of the Women's Institutes were unchanged since its formation over 50 years ago, our changing social structure demanded a new approach. "Living in a new era we must put forth new effort", she stated. Mrs. LeBaron expressed the appreciation of the Q.W.I. for the assistance given by the Department of Agriculture, also to the College for their friendly hospitality and the encouragement always given the adult education program of the W.I. Mention was made of the Handicraft Exhibit, where a creditable display of some of the work done during the past year by those taking the different courses could be seen.

Speakers

Miss Margaret Kerr, R.N., Editor "Canadian Nurse", used the children's warming up count as the basis of her most interesting talk, "Three—to Get Ready". "Health is purchasable, providing money is spent at the right time by people who care enough about safeguarding the health of the community", said Miss Kerr. Q.W.I. members were urged to take a more active interest in their local health units and were advised to procure copies of and study the American booklet, "Your Neighbour's Health is Your Business". Miss Kerr urged student nurses be given support, stating that Canada was short 8000 nurses.

"The Farmer's Woodlot", an address by Mr. M. R. Wilson, Resident Manager, Canadian International Paper Co. Grenville, was of much interest to farm women. Mr. Wilson emphasized the need of expert advice before slashing into the farm woodlot. "If you plan your wood cutting wisely, leaving trees for future crops, you will find the yearly profits for your forested acres surprisingly high", said Mr. Wilson. Protection from fire, grazing, insects and disease was urged. Films shown by Mr. Wilson, in keeping with this subject, were of great interest.

Mrs. W. H. Holmes, B.A., D.C.L., in her address, "A Writ of Summons", asked that Canadian women develop increasing interest in, understanding of, and anxiety about the affairs of the community, the nation, and the world. Apathy, defeatism, or failure to assume their responsibilities should not cause them to underestimate their potentialities, since women represent 49% of the population of Canada. In reviewing the achievements of the past few years, Mrs. Holmes said that more and more women were being elected as mayors and to other civic offices, as municipal voting rights have been won. "For every right we possess there is a corresponding obligation. As a group we have taken our rights for granted and failed to shoulder the responsibility", said Mrs. Holmes.

Prof. C. Wayne Hall, Macdonald College and Chairman of the Curriculum Committee of the P.A.P.T., in a most informative address expressed admiration of the convention theme. Groups such as ours are in a strong position. The needs of today differ from those of even 10 years ago. While there may be a difference of opinion, the opinion of such groups as ours, particularly those making a study of the present curriculum, is welcomed. The impact of the home influence on the child's future is greater than that of the school. Education should develop in five areas, (1) Health, (2) Economic efficiency, (3) Spiritual growth, (4) Civic competence, (5) Social competence. Prof. Hall left all with the thought that through the co-operation of the home, community and teachers the new crop of students should more fully measure up to the five requisites.

Mrs. Reusing, Chairman Penal Reform Committee, Montreal Council of Women, in a brief address deplored the condition of the Protestant Women's Jail, stating that one third of the inmates were mental and in spite of many promises of improvement little had been done. Since the vote and opinion of women now carries a great deal of weight, all delegates were urged to visit local M.L.A.'s and request that investigations be made and improvement of conditions receive prompt attention.

Reports

The report of Mrs. Taylor, Q.W.I. Secretary, stated that there are now 101 senior branches, a new one at Lakeview in Gatineau being organized recently and Stark's Corner, Pontiac re-organizing. Membership for the province approximates 3000. Four times as many pamphlets were loaned from the Q.W.I. library the past year, "showing W.I. members are coming to grips with the educational program of the Q.W.I." The personal parcel project is still being carried on by 80 branches, which sent 960 parcels during the year with special gift parcels at Christmas. Inquiries for information about W.I. work have been received from such far away places as India, Iran, Southern Rhodesia, and Tasmania.

Miss Elizabeth Campbell, Home Economist, in her report, stated a busy year had been spent, with 11 sewing, 6 painting, and 2 nutrition courses given. She was particularly pleased with the response to the "Painting for Pleasure" course and partly as a result of this enthusiasm the formation of a travelling art exhibition is being considered by the Information Centre, Macdonald College. Reporting on her work as Junior Supervisor, Miss Campbell said that the past year had been an exciting one. Three active Junior Groups were working on their various projects. The junior pin, designed by Miss Leila Chisholm, New Carlisle Jr. W.I., was on display, also the junior sweater. A hand book, which will include the aims, policy and organization of Jr. W.I.'s is being compiled.

Miss Ida Bruneau, Handicraft Technician, very excited over the announcement that the Department of Agriculture was providing a second station wagon, reported an increase in the numbers attending the various classes. Rug making still tops the list in popularity. Nine branches had rug making courses, five leather glove making, four weaving and two leather work. Miss Bruneau expressed her disappointment that so few members entered any of their work for the Handicraft Exhibit and urged all members to do this in order that others might see the excellent quality of workmanship done by those attending the classes.

Convenors' Reports

The report for Agriculture stated that 17 school fairs were sponsored by branches and assistance given with others, 100 talks and discussions held, with "Conservation" high on the list of popular topics. Donations were made to Agricultural Societies and Calf Clubs, beautification of cemeteries and school grounds, a memorial rock garden planned and two boys sent to the Farm Forum short course at Macdonald College.

Mrs. Earl Gardiner, convenor of Education, reported 10 counties gave scholarships, and one county has established a fund for this purpose. Many other prizes were donated. Grants were given for hot lunch projects, first aid equipment placed in schools, kitchen equipment installed, and one branch gave financial assistance towards the purchase of a projector. Many localities are benefitting by the bookmobile operated by the MacLennan Travelling Libraries.

"Many courses in sewing, nutrition, cooking and painting have been given in the past year", reported Mrs. T. H. Kirby, convenor of Home Economics. School lunches were supplied, contributions made to school fairs, clothing remodelled for the needy, catering to local affairs was one of the popular fund raising methods, also teas, sales of hand work and rummage sales.

The report on Welfare & Health, presented by the convenor, Mrs. George Leggett, showed that financial support had been given several hospitals and welfare organizations. Some branches own a hospital bed and others a wheel chair, which are in constant use. Much

used cotton has been donated to the Cancer Society, a greatly appreciated service. Among the work done for local schools was the canning of fruit and vegetables for school lunches, cod liver oil furnished, assistance given to school nurses and Dental Clinics and Health Units.

Mrs. E. S. Reed, convenor of Citizenship, reported an increase of memberships in United Nations Association. Discussions on outstanding events were mentioned and "Citizenship" has been a much featured topic for addresses, many of them given by the clergy and local Members of Parliament. Greater use has been made of documentary films.

"All branches seem more publicity conscious", reported Mrs. W. T. Evans, Publicity convenor. There has been a greater demand for material for discussions on Publicity and films are becoming increasingly popular, a few branches reporting buying a projector. About 100 subscriptions to Federated News go out to members over the province, thus keeping all branches better informed on the work of the W.I. throughout the country. Radio programs compiled by W.I. members are more numerous and varied.

Resolutions

Last year's resolution on Compulsory Pasteurization of Milk for Sale in this Province was re-worded and passed, emphasis being placed on the need for an educational program with this objective in mind. Homes for the Aged, where they could live in comfort on the old age pension, was another resolution and Welfare Societies in Montreal are again asked to place mentally retarded children in rural districts only where there are facilities in the schools for training them to be useful citizens. The usual courtesy resolutions were also passed: to the Department of Agriculture, Macdonald College, Press and Radio, and all those who helped in any way to make the convention such a success. These were presented by the chairman of the Resolutions Committee, Miss Alice Dresser.

Nominations

The report of Mrs. W. J. Fuller, Chairman of the Nominations Committee follows: Hon. President, Mrs. W. C. Smallman, Dundee; Hon. Vice-presidents, Mrs. A. E. Abercrombie, Lennoxville, Miss A. S. Pritchard, Wyman; Mrs. M. E. McCurdy, Lennoxville; Past President, Mrs. R. Thomson, Abbotsford; President, Mrs. G. E. LeBaron, North Hatley, 1st Vice-president, Mrs. G. D. Harvey, Stanbridge East, 2nd Vice-president, Mrs. H. Ellard, Wright; Secretary, Mrs. H. G. Taylor, Macdonald College; Treasurer, Mrs. George Parsons, Bury. Convenors: Agriculture, Mrs. Gordon Brown, Cowansville; Education, Miss Verna L. Hatch, Sherbrooke; Home Economics, Mrs. T. H. Kirby, Cookshire; Citizenship, Mrs. E. S. Reed, Gaspé; Welfare & Health, Mrs. George Leggett, Lachute Mills; Publicity, Mrs. W. T. Evans, Lennoxville. Representatives to F.W.I.C., Mrs. LeBaron and Mrs. Ellard.

Discussion Period

On the last day a discussion period followed the opening of the "Question Box", conspicious at the entrance of the Assembly Hall during the entire convention. This proved most informative and the comment was heard, "More time should be given to these discussions". Mrs. LeBaron, Mrs. Harvey, Mrs. Fuller and Miss Dresser were members of the "answer" committee. Information of general interest was that some W.I. Community Halls are granted tax exemption by their municipalities, and many were the answers to particular branch problems. One question was "Picnic grounds and roadside tables have been provided in some provinces beside the highways. Why can't we have them?" (Something to work for?)

Pleasant interludes of sing-songs and brief periods of relaxation were interspersed throughout the sessions, and films added to the enjoyment. One, on the ACWW Copenhagen Conference, was of particular interest.

For those delegates who could arrive Tuesday afternoon a talk on the new synthetic materials, nylon, orlon, detron, etc., had been arranged. This was given by Miss Martha Job, Textiles Division, Canadian Industries Ltd., Montreal, who displayed finished garments and used a film to explain the process of manufacture of these fascinating products.

On Thursday afternoon, having had three days of interesting discussions, informative talks and friendly visits, the delegates packed their plump note books. Returning to their various branches they would share the inspiration gained, the plans made for the forth-coming year, and the deeper realization that our responsibility was indeed to "Home and Country", and to try to help with the solving of the problem of sister nations where the women and children are faced with great difficulties. Each delegate must feel a resurgence of faith in the sincerity of our ability to face the "New Era—(with) New (and greater) Effort."

Ste. Annes members go to the fair. A group at Ormstown.

The Month With The W.I.

Reports of the Leadership Training Course are mentioned this month by all those branches that sent members. "Splendid", is the adjective used most frequently in describing them. But best of all is one comment made, "Instruction on rug-making has now been given and helpful information on operating a projector". (Kazabazua) We hope to hear more such reports of this practical application of the new skills, thus fulfilling the objectives of the Course.

Cheer at home and abroad has the usual prominent place in all reports, a permanent part of all W.I. activities.

Argenteuil: *Arundel* had two guest speakers, Mr. A. Bothwell, who gave a talk on "Wheat" and Mr. A. Ogilvy, whose topic was "Shrubs and Plants". The branch catered to the Teacher's Association, proceeds to further W.I. work. *Brownsburg* provided refreshments for the Scout Rally and the supper for the graduating class of Brownsburg school. An illustrated talk on "Mental Health" was given by Mrs. W. M. Istvanffy, R.N. *Lachute* members were entertained by Mrs. George McGibbon at her farm in the Laurentians. The house, which was built in 1840, has been recently remodeled. *Lakefield* made arrangements for a military whist. Pioneer voted $5 to the Children's Memorial Hospital. *Mille Isles* featured an apron parade and a sale of food and fancy work. Arrangements were made for a community picnic. *Upper Lachute and East End* held a social evening and party donated $10 to the Crippled Children's Hospital.

Bonaventure: *Black Cape* has prepared a scrap book on Canada. A history of the community, compiled by Mrs. H. M. Henderson, is to be published in the local paper. Mrs. Herbert Dimock gave good advice on "The Nagging Wife". A travelling apron brought in $35. *Grand Cascapedia* heard a report of the County meeting given by Mrs. Percy Barter. At *Marcil,* Mrs. Oliver Watt stated that the scrap book on Canada prepared by Mrs. R. Prevost, had won a prize at the county meeting. A salmon supper is to be held at Port Daniel Hall. *Port Daniel* heard a talk on the Governor General, the Hon. Vincent Massey, given by Mrs. E. A. Sweetman. *Restigouche* had as guest of honour at their 30th annual convention, Mrs. George Parsons, Bury, provincial treasurer. *Shigawake* observed Citizenship Day with special services conducted by Rev. John Franklin.

Chat-Huntingdon: *Aubrey-Riverfield* celebrated Grandmothers' Day. A paper on "The life of Queen Victoria", and a poem, "Growing Old", were read by Mrs. Jas. Angell. The history of this branch is now ready to be sent to the Q.W.I. office. $13.50 was voted to the QWI Service Fund. *Dundee* heard a series of papers on "Mental Health", led by Mrs. Gregor Leslie. Also a paper by Mrs. Duncan Brown, Ormstown, "When a Child Has Cerebral Palsy". *Franklin Centre* entertained 25 members from Aubrey-Riverfield. A reading was given by Mrs. Sam Reddick, a poem by Mrs. Bennie, and a quiz was conducted by Mrs. G. Easton. A demonstration on mending overalls and others articles with "Jiffy-Sew" was given by Mrs. John Gruer and Mrs. G. Easton told how to convert a pullover sweater into a cardigan. The history of Franklin W.I. was read by Mrs. R. J. Blair. The amount of $5.75 has been given for prizes. *Hemmingford*—a correction here. The branch gave $35. to the QWI Service Fund instead of $5 as reported by error in last month's Journal. A splendid donation. Plans for the School Fair are being made, the Salvation Army Drive was a success and 48 certificates were given to those taking the Home Nursing Course. A tea was given for a former member, Mrs. Cunningham, who has now moved to Valois. *Howick* celebrated Grandmothers' Day. Recitations were given by Mrs. Wm. Hamilton and Mrs. Simms exhibited hair-pin work, also woven articles. *Ormstown* had a program in honour of their special guests, "Grandmothers". Readings were given by Miss K. Murphy, Mrs. W. Rember and Mrs. C. Moe and a quiz conducted by Mrs. L. Cullen. The sum of $8 each was voted to Protestant and Catholic Schools for prizes in public speaking.

Compton: *Bury* is writing a branch and village history. Articles were brought in for the exhibit. Assistance will be given to two junior members wishing to attend camp. $5 was donated to the Dental Clinic and a package sent to a local boy in Korea. *Brookbury* voted $11 for prizes in Bury High School and gifts were given to two members who have moved away. *Cookshire* observed Grandmothers' Day. Gifts were presented to the eldest and the youngest grandmother, also the grandmother with the greatest number of grandchildren. Antiques were on display and a guessing contest on pictures of members when 10 years of age was enjoyed. A rummage sale netted $21 and $50 was donated to the Dental Clinic. An outfit was brought in for the exhibit. *Canterbury* made plans for a salad supper. The travelling basket brought in $10.37 and articles sold netted $2.26. *East Clifton* heard a paper on "Economical Meat Dishes",

Rawdon Junior Women's Institute all decked out in the new Junior sweaters.

and an exhibit of articles made from odds and ends further promoted this idea of Thrift. A donation was made to the Dental Clinic. *East Angus* realized $38.50 from a paper drive. The sale of plants and bulbs netted $6.35. Used linen was brought in for the Cancer Society. *Scotstown* held a salad supper. At the meeting Dr. Humphries gave a talk on "The Care of Children's Teeth". A Singer Sewing Machine demonstration was held. Donations voted were $35 to the cemetery, $20 to the Library and $5 to the QWI Service Fund. *Sawyerville* had an exhibit of old hand made pictures, 1785, also many other articles over 100 years old. Visitors from East Clifton were present.

Gaspe: *L'Anse Aux Cousins* presented their hostess, at the last meeting, Mrs. E. S. Reed, provincial convenor of Citizenship, with a silver sugar, cream pitcher and tray in appreciation of her service to the W.I. in Gaspe. Mrs. Reed is leaving the district. *Wakeham* held a food sale, a rummage sale, and a parcel post sale, which totalled the sum of $82. A committee was formed to chose books for the Library. A UN flag, made by the members, was on display at the annual convention.

Gatineau: Under the supervision of Mrs. W. J. Fuller, county president and Mrs. J. Hopkins, vice-president, a new branch was formed at Lakeview. (We hope to hear more about this branch. In the meantime a very hearty welcome). *Aylmer East* held a picnic for the children of South Hull Schools. Curtains were donated for the High School auditorium and bats, nets, and balls for tennis at the school. *Eardley* heard papers on "Swap with Grandma" and "Going, Going, Gone". Two contests with prizes were featured. The entry fee to Ottawa Exhibition was paid and $5 voted for school fair work in the district. *Kazabazua* plans to exhibit articles at both Aylmer and Ottawa Fairs. A paper on "Agriculture" and a contest on birds formed the program. The branch sponsored a picnic for the school children at the end of the school year. *Rupert* held their annual Memorial Service at the Union Cemetery. The branch has recently painted the cemetery fence, and put a name plate over the entrance. Under the auspices of this W.I. three schools in the townships will be entertained at Phillip Lake, Gatineau Park. $15 was voted to buy lamps for the Gatineau Memorial Hospital. *Wakefield* heard a talk by Dr. H. J. G. Geggie on "Old and New Drugs". A garden party was held when a handmade table cloth, the gift of an English lady in Sheffield was sold in aid of the hospital. Miss A. B. Robb was appointed to prepare the branch history. Complete returns of the Red Cross collections for Wakefield and surrounding district, under the sponsorship of the W.I. show $587.50. *Wright* held their June meeting at the Bingham School, with a program entertaining to children and served a bountiful picnic lunch. A rummage sale for the Junior Red Cross netted $12.20 and a W.I. sale table made $10.80 for the funds. The Red Cross drive here, again sponsored by the W.I., realized $126.85

Jacques Cartier: *Ste. Annes* members enjoyed a trip to the Ormstown Fair. At their meeting a film on Canada and its People was shown by the Citizenship convenor, Mrs. Robertson.

Missisquoi: *Cowansville* heard an article on "The Advantages of Eating Fish", with suggested recipes for cooking. A class in painting has been given by Miss Campbell. Plans have been made for judging school gardens. A donations of $15 was given the Brome-Missisquoi Hospital. *Dunham* had a lively discussion on ways and means for money raising. $10 to the Sweetsburg Hospital is reported here. *Fordyce* entertained Dunham and Cowansville at a social afternoon. *Stanbridge East* heard a lecture on "Soil" by Mr. Rousseau and a display of articles and literature on insect control.

Pontiac: *Elmside* members are planning a fashion parade, the garments supplied by the Dominion Textile Co., made of flour bags. *Bristol* held an auction of articles brought to the meeting by each member. *Quyon* read a letter of thanks from the Boy Scouts for a flag donated by this branch. 16 boys took advantage of the wood working course sponsored by this branch, the work to be exhibited at Quyon Fair. An account of a trip across Canada was given by Mrs. F. R. Hutchison convenor of Agriculture. *Shawville* heard a talk by Mr. J. L. MacKeen, School Supervisor, on "The Mechanism of Education". *Wyman* had as guest speaker, Mrs. Geo. Templeton, Ayr, Scotland, who told of visiting W.I. branches in Australia and New Zealand, and of their work in Scotland. Greetings were brought by Mrs. W. J. Murray, past county president and a resumé of the branch history since its organization, March 3, 1913, was given by Miss Edith Edey. Six charter members were present.

Quebec: *Valcartier* entertained the provincial president, Mrs. G. LeBaron, who gave a talk on W.I. activities. $50 was voted to a neighbour who lost his

Richmond Young Women's with their mothers who were the guests of honour at their last meeting.

barn through fire and $36 towards prizes in the schools. The sum of $49 was the receipts of a dance.

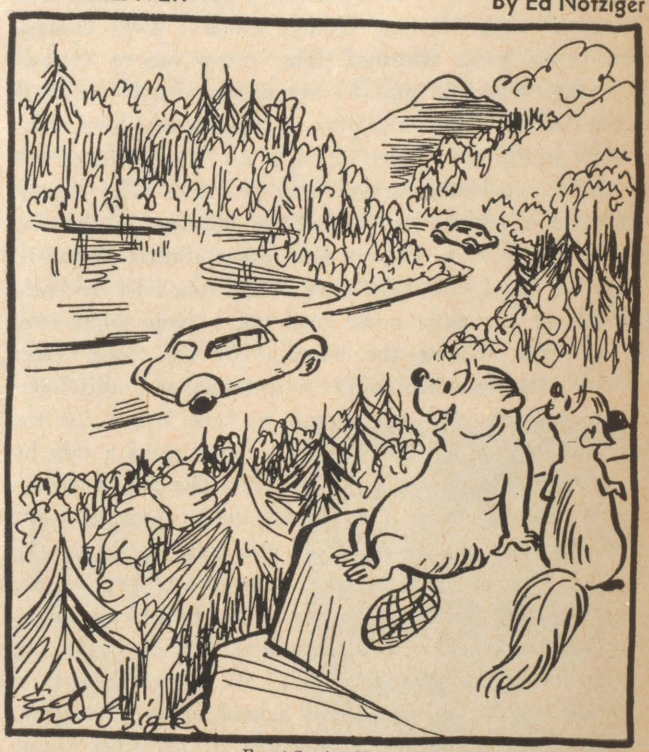
Richmond: *Cleveland* entertained Denison's Mills members at a social afternoon, with several visitors present. An apron parade was held, followed by an auction of the aprons which netted $8.50. *Dennison's Mills* held an auction sale of remnants, donated by two manufacturers. A picnic was planned for the local children and a card party realized $25.35 for the treasury. *Melbourne Ridge* members collected $127.50 for the Red Cross. A paper was given by the Publicity convenor, "When a Man's time Comes". The review of the prize list of the School Fair was given by the committee. The bring and buy parcels yielded a satisfactory sum. *Richmond Young Women's* featured a Mother and Daughter Day, held at the home of Mrs. K. Barrie. Upon arrival each mother was presented with a corsage by her daughter. Several guests were also present. A quiz on towns and cities of Quebec was held, also an auction of home made toffee. *Windsor Mills* held a calf judging contest with prizes given. Fifty cents per member was voted to QWI Service Fund and all were in favour of Pooling Fares.

Shefford: *Granby Hill* is starting a building fund for a community hall. Plans were made for the annual W.I. picnic. Each member has made articles from a feed bag for the sale in the fall. *South Roxton* entertained the grandmothers and served a salad tea. *Warden* held a contest on Irish names and a hat trimming contest. *Warden Juniors* have received their sweaters. Some of the girls are going to Frontier Lodge and some to Lake Wallis. As part of their Red Cross training course was on baby bathing, the baby of a neighbour, Mrs. Groulx, was borrowed for the demonstration.

Sherbrooke: "Turkeys", the gift from the Department of Agriculture to branches in this county, was the popuplar theme of all meetings. *Ascot* is working on the scrap book and progress is being made on the quilt for the Tweedsmuir Competition. *Belvidere* heard the branch history compiled and read by Mrs. H. Daigle, convenor of Education. At *Brompton,* Miss Mary Hall, CKTS Sherbrooke, gave a talk on "Publicity". A contest on raisin pies brought many delectable samples to the meeting. A box was sent to a veteran. *Lennoxville* held an attendance contest during the year. The victors, captained by Mrs. Jamison, were entertained by the losers, captained by Mrs. Kennett. Mrs. Glass, president, won the prize for 100% attendance, with Mrs. Wallace in second place. Mrs. Abercrombie read a letter from Miss Christmas expressing her thanks for the many cards and letters received from Canadian friends. A new electric stove has been installed in the Club room. *Milby* donated money for school prizes at Ascot. A new member was welcomed. *Orford* had a demonstration of Be-Nardin Lids, to make deep screw top jars into sealers. An apron parade showed many lovely designs made by members.

Stanstead: *Ayer's Cliff* heard an article on "Soaps and Detergents" by the Home Economics convenor. A program on "Health Education" was given by the convenor of Welfare and Health. A committee was named to work on the branch history. *Beebe* presented life memberships to three charter members, Mrs. Crook, Mrs. Turner and Mrs. House, who were instrumental in organizing the Beebe W.I. 31 years ago. A report on the Painting for Pleasure course, under the supervision of Miss Campbell was given. Eight members and six school students were in the class. The report of the school prizes for essays was given by the convenor of Education. A new German family was presented with a blanket. A demonstration of Stanley products was held. *Minton* held a cookie contest and a guessing contest, with prizes for both. North Hatley contributed $25 towards the support of a Greek boy. A card party was held. *Stanstead North* heard a paper on "Publicity" by the Publicity convenor. Proceeds from a recent food sale were $17.50. *Tomifobia* had their usual busy meeting. *Way's Mills* held a cookie contest. Members paid for their tea with a penny for each inch waist measurement. A demonstration on flowers made from wood fibre was given by Mrs. Clyde Flynn, Derby Line, Vt.

"JOE BEAVER" By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"The human race lives on trees—if trees didn't protect and maintain soil and water resources, there'd be no human race."

Strictly Business

"Strictly business" might be said of the annual board meeting that always precedes the convention. Here the work of the past year is reviewed and evaluated, policies discussed and objectives framed for the coming month in readiness to be presented to the delegates at open convention for approval (or the reverse if members so desire). Only some of the more important items can be given in this limited space, but the minutes of this meeting, which have gone to every branch, give the complete story.

Two reports heard with especial interest were those of the special committees; High School Curriculum and Pooling of Fares. Mrs. W. B. Holmes, chairman of the first named, had conducted a survey and gave a report of the findings. Further study will be required before the situation is clearly defined and she was asked to continue this research with power to add to her committee if desired. Mrs. Reed, chairman of the second committee, explained clearly the issues involved in the system of pooling of fares and brought in a notice of motion that this be tried for a period of three years in this province. The motion itself will be brought before the delegates for action at the 1953 convention.

Only one essay had been received in the Tweedsmuir Competition. As this had considerable merit it had been forwarded to the F.W.I.C. to compete in the national contest. Branches will be notified of dates when entries in the other sections, quilt and history, must be submitted.

Affiliations with the Montreal Council of Women, Canadian Handicraft Guild (Quebec Division) and the United Nations Association are to be continued, and association and support for the work of the Canadian Association of Consumers.

Approval was given that the sum of 20 cents be donated by each branch towards the expenses of the ACWW Conference to be held in Toronto, 1953. This is to be in by Sept. 1st of this year, and sent to the provincial treasurer through the usual channels.

Local donations for local purposes, such as hospitals, schools, etc., are to be given directly, with the convenors reporting these, *with amounts,* so branches will get due credit. All other donations shall be sent as usual, through W.I. channels.

The raising of the provincial affiliation fee was discussed and notice of motion given that this be brought before the 1953 convention for action, for or against.

Provincial objectives for the coming year were approved as follows: (1) To continue the study of Conservation. (2) Home Nursing and First Aid classes still stressed as the rural women's part in the Civil Defence program. (3) Support junior work, seeking to form groups wherever possible. (4) A study of the British Isles, in view of the forthcoming international conference, when representatives from that country will be visiting in Canada.

But here's an item that wasn't business. A pleasant interlude came on the first afternoon when all members of the board were guests of the Macdonald Women's Union at a delightful tea at the home of the president, Mrs. D. C. Munroe. A friendly thought which was much appreciated and enjoyed.

Charlie Petch is Honoured

Friends of C. E. (Charlie) Petch, Federal Entomologist at Hemmingford for the past forty years, gathered to the number of about a hundred on July 30th to pay him honour on his retirement from active duty. The guests represented many groups; growers, representatives of the Pomological Society, the Federal and Provincial Departments of Agriculture, Macdonald College, the University of Montreal, and other organizations were there to tell Mr. Petch how much his untiring and unselfish work on behalf of apple growers was appreciated.

Roswell Thomson, speaking on behalf of the Pomological Society, voiced the sentiments of the whole group when he pointed out that although Mr. Petch would no longer hold any official position, he would find himself still on call for help and advice from the growers, who had always been able to depend on him for sound and forceful recommendations. Each speaker outdid his predecessor in describing Mr. Petch's outstanding contribution during his long tenure of office as an entomologist, and it was no wonder that Mr. Petch was a little overcome with the warmth of his reception.

Mr. Petch (left) receives a presentation from Roswell Thomson, M.B.E., acting on behalf of the entire gathering. That's Mrs. Petch at the right.

THE COLLEGE PAGE

The Macdonald Clan

Notes and News of Staff Members and Former Students

Island Province Honours Mac Grad

A unique honour was paid to one of our graduates this spring when Harold W. Clay, B.S.A. '22, received a "Certificate of Special Recognition For Outstanding Services to Agriculture" from the Government of Prince Edward Island.

The certificate, of the type known as an "illuminated address", was signed by Premier J. Walter Jones, C. C. Baker, Minister of Agriculture, C. H. Yeo and J. L. Dewar, president and secretary of the local Federation of Agriculture, and W. W. Gibson and F. Anderson, president and secretary of the Swine Breeders Association. The wording was as follows:

"As an official in the service of the Federal Department of Agriculture for thirty years, Mr. Clay's diligence, devotion and vision have been of such high order that agriculture and the general economy of the province have benefitted immeasurably through improvement in livestock breeding as the result of policies encouraged by this official. The excellence of Island Yorkshire swine as demonstrated by official grading, export demand throughout the continent and showring competition at the Royal Winter Fair is in particular proof of progress resulting from carefully planned and efficiently supervised promotional programmes. In testimony and appreciation whereof we have on behalf of the Province of Prince Edward Island set our hands."

Mr. Clay's son, following in his father's footsteps, is at present a student at Macdonald College in his final year in Animal Husbandry.

Our Summer Activities

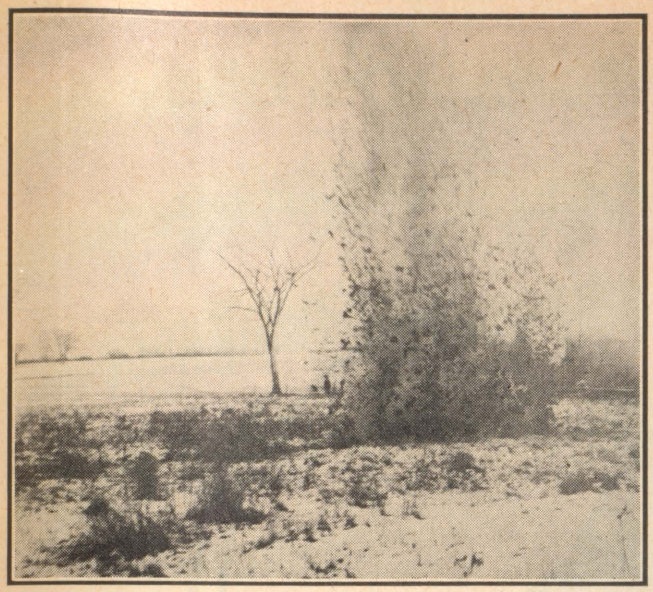
Macdonald College has been host to widely differing groups of visitors all summer, and the Field Day Committee, the group of staff members who have the responsibility of planning the reception of our guests have been busier than usual.

The summer activities started in May, when a group of High School pupils came out to see what an agricultural college looks like. Later in the same month a hundred food technologists from Montreal spent the day here, and a week later we held the annual leadership training course for Women's Institute members. In June we welcomed a large group of farmers and their wives from Texas, who were making a tour of Eastern Canada and the United States. The annual meeting of the Quebec Women's Institutes is always an annual feature, and we had some 200 women for that.

The day after they left we received a visit from another 200 boys and girls of 4-H clubs in Ontario who spent the day here. At the beginning of July the summer schools commenced; the regular summer school for teachers, the French specialists' summer school and a special course in handicrafts. In August came the judging elimination contests for the junior calf clubs of the districts, as a preliminary to the finals at the Sherbrooke Fair, and a visit of a number of agricultural economists representing several European countries.

Then we had our regular Farm Day and Macdonald Day, both of which were mentioned last month. It has been a busy summer for some of us, but a most interesting one.

Interested In Engineering?

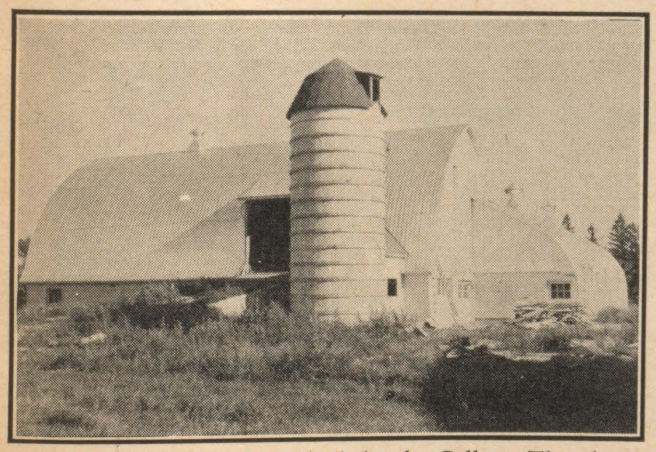


Whether it be blasting ditches or clearing new land it's all the same to the Department of Agricultural Engineering, who pass their "know-how" along to their students.

AGRICULTURAL Engineering has been defined as the application of engineering principles to the solution of farm problems. Hence the work of the Department of Agricultural Engineering covers a wide field.

In order to accent the wide diversity of the work covered by agricultural engineering it is thought desirable to name and describe briefly the five divisions into which the work is usually divided. They are (1) Land development, which considers land clearing, erosion control, and moisture control, and this latter includes farm pond building, farm drainage, and irrigation; (2) Farm Power, which includes animal, water, wind, electric and heat power, the latter of which is the most important because it includes gasoline and diesel engines; (3) Farm Machinery, for tillage, harvesting, processing and spraying and dusting; (4) Farm Buildings, for all farm purposes, and (5) Structural Equipment, which considers the equipment necessary for heating, refrigeration, lighting ventilation, water supply and sewage disposal.

The work of the Agricultural Engineering Department at Macdonald College has been divided three ways in the past: instruction of the students of Macdonald College



This is the new beef barn built by the College. The planning and erection of this structure was supervised by the agricultural engineers.

in all phases of Agricultural Engineering, research work, and extension work. Instructional work has been carried on since the department was organized, extension work has been accented, and some research work has been done. The present policy of the Department is to continue the instructional work, relating it as closely as possible to the needs of the farm, continue the extension work, and take on some additional research work.

Occupying the most recently constructed buildings on the Macdonald College Campus, the Department has ample space for laboratories for farm machinery studies, farm shop work, woodwork, and farm motors. A well-lighted draughting room provides ideal conditions for draughting classes, and a large lecture room is equipped for motion picture and slide projection thus making provision for the latest in instructional methods.

The Department gives instruction in all phases of Agricultural Engineering to undergraduate students at the college. Since 1944 an Option has been offered in Agricultural Engineering, and each year since that time a reasonable proportion of the third year has entered this option.

Much can be said about the extension work. Essentially it has taken the form of an information service in which copies of plans for making all sorts of devices, equipment and buildings for the farm have been offered to the farming people of Canada. Customarily a small charge is made for the plans so that the cost of printing and mailing is covered.

Since its inception over 630 different plans and circulars, including farm drainage plans, have been prepared. Of these about 150 are of general interest, and some of the 150 have enjoyed very popular demand. The service has made the Department of Agricultural Engineering of Macdonald College known from coast to coast in Canada among the nation's farmers, and has done much to help them solve their problems.

One of the interesting things about agricultural engineering is that it must work closely with practically every other branch of agriculture, seeking information and providing assistance. For example, engineers can design buildings, but to design *farm* buildings they must have information from Animal Husbandry men as to the required environmental conditions for the animals to be housed, or from the Agronomy men as to the conditions necessary for the storage of crops. Whether they like it or not, Agricultural Engineers cannot work alone.

Present trends in farming are bringing the agricultural engineer more and more into extension work. They are requiring new uses for old equipment, and new equipment for special jobs, and in both the agricultural engineer can provide assistance. For example, the trend towards grassland farming is demanding changes in irrigation practices, grass harvesting methods, hay and silage making and storage, and fertilizer application, changes that agricultural engineers are helping to bring about.

THE MACDONALD LASSIE